Page 27, line 35 of Table 1, please insert --(SEQ. ID. NO. 42)-- after "LYFEYLDKDL";

Page 27, line 36 of Table 1, please insert --(SEQ. ID. NO. 43)-- after "LVFEYLDSDL";

Page 27, line 37 of Table 1, please insert --(SEQ. ID. NO. 44)-- after "IGADFLTKEV";

Page 27, line 38 of Table 1, please insert --(SEQ. ID. NO. 45)-- after "IGVEFLNKDL";

Page 27, line 39 of Table 1, please insert --(SEQ. ID. NO. 46)-- after "ISVEFLVLDS";

Page 27, line 40 of Table 1, please insert --(SEQ. ID. NO. 47)-- after "SDIDFLIEEI";

Page 28, line 1 of Table 1, please insert --(SEQ. ID. NO. 48)-- after "AIGEFILVDK";

Page 28, line 2 of Table 1, please insert --(SEQ. ID. NO. 49)-- after "QKQEYKTLEY";

Page 2, line 3 of Table 1, please insert --(SEQ. ID. NO. 50)-- after "PPPxY"; and

Please insert the enclosed paper copy of the SEQUENCE LISTING at pages 31 through 42 of the application.

IN THE CLAIMS:

1. (Amended) A method for controlling or up-regulating the availability or activity of a protein comprising regulating binding of [the] a ubiquitin[/]-proteasome system at a ubiquitin[/]-proteasome binding site of said protein.

2. (Amended) [A]The method according to claim 1, wherein said ubiquitin-proteasome binding site comprises [the] an amino acid sequence motif xEFIxxDx (SEQ. ID. NO. 1)[or a sequence essentially corresponding thereto], wherein D is [the amino acid] aspartic acid, E is [the amino acid] glutamic acid, F is [the amino acid] phenylalanine, I is [the amino acid] isoleucine and X is any other amino acid.

3. (Amended) A method for controlling the [availability and/or] signal transduction capability of a cell surface receptor comprising providing an inhibitor capable of inhibiting proteolytic cleavage of said receptor.

4. (Amended) [A]The method according to claim 3 wherein said inhibitor is capable of inhibiting

proteolytic cleavage of an intra-cellular part of said receptor.

5. (Amended) [A]The method according to claim 3, wherein said inhibitor is capable of inhibiting proteolytic cleavage of an intra-cellular part of said receptor.

6. (Amended) [A]The method according to [anyone of] claim[s] 3 [to 5], wherein said receptor is a hormone receptor[, preferably selected from a group consisting of amino acid derivative, prostaglandine, peptide or protein hormone receptors].

7. (Amended) [A]The method according to claim 6, wherein said receptor is a growth hormone receptor.

8. (Amended) [A]The method according to claim[s] 1, [or 2] wherein said protein is a transport protein.

9. (Amended) [A]The method according to claim 8, wherein said transport protein is Glut4 insulin regulated glucose transporter.

10. (Amended) An inhibitor for regulating the availability or activity of a protein, said inhibitor comprising a [(poly)]polypeptide [or (poly)peptide analogue or mimeticum] that [is derived from, competes with, or binds to an amino acid sequence located at or around a] interferes with ubiquitin[/]-proteasome system regulation of cell surface receptors of a cell [binding site located in a protein].

11. (Amended) [A] The [(poly)peptide or (poly)peptide analogue or mimeticum] inhibitor according to claim 10, wherein said polypeptide interferes with said ubiquitin-proteasome system by binding to a ubiquitin-proteasome system binding site [comprises the] comprising an amino acid sequence motif xEFIxxDx (SEQ. ID. NO. 1)[or a sequence essentially corresponding thereto],

wherein D is [the amino acid] aspartic acid, E is [the amino acid] glutamic acid, F is [the amino acid] phenylalanine, I is [the amino acid] isoleucine and x is any other amino acid.

12. (Amended) The method according to claim 3, wherein [An] said inhibitor is capable of inhibiting proteolytic cleavage of a cell surface receptor [for use in a method according to anyone of claims 1 to 7].

13. (Amended) The method according to claim 12, wherein said [An] inhibitor [according to claim 12 which] is capable of inhibiting proteolytic cleavage of [the] an intra-cellular part of said receptor.

14. (Amended) The method according to claim 13, wherein said [An] inhibitor [according to claim 13] is selected from the group of proteasome inhibitors[, such as] consisting of MG132, carboxybenzyl-leucyl-leucyl-leucinal, lactacystin, carboxybenzyl-leucyl-leucyl-leucyl vinylsulfone [or] and the β-lacton form of lactacystin.

15. (Amended) The method according to claim 13, wherein said [An] inhibitor [according to claim 13 comprising] comprises a [(poly)]polypeptide [or (poly)peptide analogue or mimeticum] that is derived from, competes with, or binds to an amino acid sequence located at or around a [ubiquitin and/or] ubiquitin[/]-proteasome system binding site located in [the] an intra-cellular part of a cell-surface receptor.

16. (Amended) The method [An inhibitor] according to claim 15 wherein, said ubiquitin-proteasome system binding site comprises the amino acid sequence motif xEFIxxDx or a sequence essentially corresponding thereto, wherein D is [the amino acid] aspartic acid, E is [the amino acid] glutamic acid, F is [the amino acid] phenylalanine, I is [the amino acid] isoleucine and X is any other amino acid.

17. (Amended) The method according to claim 16, [An inhibitor according to claim 16] wherein

said ubiquitin-proteasome system binding site comprises [the] an amino acid sequence selected from the group consisting of DDSWVEFIELDI (SEQ. ID. NO. 2) [or] and DSWVEFIELD (SEQ. ID. NO. 3).

18. (Amended) The method according to claim 12, wherein said [An] inhibitor [according to claim 12] is capable of inhibiting proteolytic cleavage of extra-cellular part of said receptor.

19. (Amended) The method [An inhibitor] according to claim 18, wherein said extra-cellular part comprises an approximately 60 kDa fragment of an extra-cellular domain of the growth hormone receptor.

20. (Amended) The method [An inhibitor] according to claim 18 [or 19], wherein said inhibitor [comprising] comprises a [(poly)]polypeptide [or (poly)peptide analogue or mimeticum] that is derived from, competes with or binds to an amino acid sequence located at or around a proteolytic cleavage signal site located in an extra-cellular part of said receptor.

21. (Amended) The method [An inhibitor] according to claim 20, wherein said cleavage signal site comprises [that] the amino acid sequence CEEDFYR (SEQ. ID. NO. 7)[or a sequence essentially corresponding thereto].

22. (Amended) The inhibitor according to claim 10, wherein said [A (poly)peptide or (poly)]polypeptide [analogue or mimeticum that is derived from, competes with or binds to an amino acid sequence located at or around a ubiquitin and/or ubiquitin/proteasome system] interferes with said ubiquitin-proteasome system by binding to a ubiquitin-proteasome system binding site located in the intra-cellular part of a cell-surface receptor.

23. (Amended) The [A (poly)peptide or (poly)peptide analogue or mimeticum] inhibitor according to claim 22, wherein said binding site comprises [the] an amino acid sequence motif xEFIxxDx

(SEQ. ID. NO. 1)[or a sequence essentially corresponding thereto], wherein D is [the amino acid] aspartic acid, E is [the amino acid] glutamic acid, F is [the amino acid] phenylalanine, I is [the amino acid] isoleucine and x is any other amino acid.

24. (Amended) The inhibitor according to claim 10, wherein said [A (poly)peptide or (poly)]polypeptide [analogue or mimeticum that is derived from, competes with or binds to] interferes with said ubiquitin-proteasome system by binding to an amino acid sequence located at or around a proteolytic cleavage signal site located in [the] an extra-cellular part of a receptor.

25. (Amended) The inhibitor [A (poly)peptide or (poly)] peptide [analogue or mimeticum] according to claim 24, wherein said cleavage signal site comprises [the] an amino acid sequence CEEDFYR (SEQ. ID. NO. 7) [or a sequence essentially corresponding thereto].

26. (Amended) A pharmaceutical composition comprising an inhibitor according to [any of claims 12-21 or a (poly)peptide or (poly)peptide analogue or mimeticum according to any of] claim[s] 10[, 11, or 22-25].

28. (Amended) A pharmaceutical composition according to claim 27 for [administering] administration in conjunction with a hormone.

29. (Amended) The pharmaceutical composition according to claim 26, wherein [Use of an inhibitor according to any of claims 12 to 21 or a (poly)peptide or (poly)peptide analogue or mimeticum according to any of claims 10,11 or 22-25 for the production of a pharmaceutical composition] said inhibitor is used for controlling the availability and or signal transduction capability of a cell surface receptor.

30. (Amended) The pharmaceutical composition according to claim 29, wherein said [Use according to claim 29 for the production of a] pharmaceutical composition is used for regulating the

activity of a hormone.

31. (Amended) The pharmaceutical composition according to claim 29, [Use according to claim 29 or 30] wherein said pharmaceutical composition is administered in conjunction to the administration of said hormone.

32. (Amended) The pharmaceutical composition according to claim 29, wherein said pharmaceutical composition is used [Use according to any of claims 29 to 30 for the production of a pharmaceutical composition] for [the] treatment of muscle wasting.

33. (Amended) The [A] method according to claim 1, wherein, said regulating binding of the a ubiquitin-proteasome system at a ubiquitin-proteasome binding site of said protein comprises controlling or up-regulating [to control or up-regulate] hormone activity by using an inhibitor polypeptide which interferes with ubiquitin-proteasome system regulation of cell surface receptors of a cell [according to any of claims 12 to 21 or a pharmaceutical composition according to any of claims 26 to 28].

Please add the following new claims:

34. The method according to claim 6, wherein said hormone receptor is selected from the group consisting of amino acid derivatives, prostaglands, peptides or protein hormone receptors.

35. The inhibitor according to claim 10, wherein said polypeptide interferes with said ubiquitin-proteasome system regulation of cell surface receptors of a cell by inhibiting ligand-induced receptor uptake.

36. The inhibitor according to claim 10, wherein said polypeptide interferes with said ubiquitin-proteasome system regulation of cell surface receptors of a cell by inhibiting receptor degradation caused by endocytosis.